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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/623,657

07/22/2003

Tsutomu Ishi

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EXAMINER

DINH, TAN X

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

07/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/623,657

Applicant(s)

ISHI ET AL.

Examiner

TAN X. DINH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6,7,13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1) The amendment filed 7/13/2007 is acknowledged. Claims 1-3,5,8-12,14 and 19-29 have been canceled.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4) Claims 4,6,7,13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over YAMANAKA (6,205,108) and APPLICANT'S RELATED PRIOR ART (EBBESEN et al, 6,236,033).

YAMANAKA discloses an optical module having module as claimed

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in claim 4, comprising an optical device including a conductive film having first and second surfaces, at least one aperture provided in conductive film and extending from first surface to second surface and a surface topography formed on at least one of first and second surfaces, wherein surface topography increases an intensity of light incident onto one of the first and second surfaces and transmitted through the aperture (Fig.3, phase shift 4. See also figures 4 and 5), wherein the center of light flux of light incident on the conductive film is deviated from the center of the aperture and wherein a displacement between the center of light flux of light incident on the conductive film and the center of the aperture is $i/2$ or less of the diameter of the light flux (figure 4 and column 4, lines 24-48), *except to specifically show that the surface topography is the shape of concentric circles.* However, this feature is old and widely used in the optical recording art as disclosed by applicant in the specification, page 3, paragraph [07] (applicant admitted the surface topography having shape of concentric circles is a well known feature in US 6,236,033 of EBBESEN et al's figure 6A, surface topography 40 for enhancing optical transmission). Since the method as taught by EBBESEN et al is old and well known in the art as shown above, obviously, someone within the level of skill in the art at the time of the invention was made would have been

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motivated to use the surface topography with shape of concentric circles in YAMANAKA's optical head for enhancing the optical transmission as claimed.

As to claims 6 and 7, YAMANAKA shows light flux incident on optical device includes aperture (figure 4, aperture at center).

Claim 13 is rejected with the same reasons set forth in claim 1 above.

Claim 15 is rejected with the same reasons set forth in claims 6 and 7 above.

As to claim 16, YAMANAKA shows the displacement between center of aperture and surface topography is $\frac{1}{4}$ or less (column 4, lines 35-48).

YAMANAKA discloses all the subject matter as claimed in claims 17 and 18, except to specifically show an optical fiber for transmitting light source and light collecting system for collecting light emitted from optical fiber. However, optical fiber for transmitting light source and light collecting system for collecting light emitted from optical fiber are widely used in near-field optical recording (for example, see KASAMA et al, US 6,631,227 in last Office action). Therefore, to use optical fiber for transmitting light source and light collecting system in YAMANAKA's optical head as claimed is deem obvious to someone within the level of skill in

the art.

5) Applicant's arguments with respect to claims 4,6,7,13 and 15-18 have been considered but are moot in view of the new ground(s) of rejection.

6) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN XUAN DINH whose telephone number is (571)272-7586. The examiner can normally be reached on MONDAY to FRIDAY from 9:00AM to 5:00PM.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER
July 16, 2007